



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/736,117	12/15/2003	Lennart J. Brandel	7343-1	3626
7590 JOHNS MANVILLE Legal Department 10100 West Ute Avenue Littleton, CO 80127		12/29/2009	EXAMINER CHOI, PETER Y	
			ART UNIT 1794	PAPER NUMBER PAPER
			MAIL DATE 12/29/2009	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.



UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents  
United States Patent and Trademark Office  
P.O. Box 1450  
Alexandria, VA 22313-1450  
[www.uspto.gov](http://www.uspto.gov)

**BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES**

Application Number: 10/736,117

Filing Date: December 15, 2003

Appellant(s): BRANDEL ET AL.

---

Robert D. Touslee  
For Appellants

**EXAMINER'S ANSWER**

This is in response to the appeal brief filed October 26, 2009, appealing from the Office action mailed June 19, 2009.

**(1) Real Party in Interest**

A statement identifying by name the real party in interest is contained in the brief.

**(2) Related Appeals and Interferences**

Examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

**(3) Status of Claims**

The statement of the status of claims contained in the brief is correct.

**(4) Status of Amendments After Final**

Appellants' statement of the status of amendments after final rejection contained in the brief is correct.

**(5) Summary of Claimed Subject Matter**

The summary of claimed subject matter contained in the brief is correct.

**(6) Grounds of Rejection to be Reviewed on Appeal**

Appellants' statement of the grounds of rejection to be reviewed on appeal is correct.

**(7) Claims Appendix**

The copy of the appealed claims contained in the Appendix to the brief is correct.

**(8) Evidence Relied Upon**

EP 1162306	Draxö	12-2001
5,433,997	LAND	07-1995

**(9) Grounds of Rejection**

The following ground(s) of rejection are applicable to the appealed claims:

*Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1, 3, 4, 6, 7, and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over EP 1162306 to Draxö in view of USPN 5,433,997 to Land.

Regarding claims 1, 3, 4, 6, 7, and 11, Draxö teaches a woven, patterned glass fiber textile fabric comprised of a glass fiber yarn with a titer of from about 30 to 75 tex as the warp, and a glass fiber yarn having a titer ranging from 190 to 350 tex as the weft, wherein the warp density ranges from 2.5 to 5 threads/cm and the weft density ranges from 2.0 to 12 threads/cm,

wherein each glass fiber yarn used as the warp and/or weft is a sliver or a texturized yarn (see entire document including paragraphs 0001-0022, 0031-0033, 0039).

Regarding claims 1, 3, 4, 6, 7, and 11, Draxö does not appear to teach that the woven, patterned glass fiber textile fabric is formed from a Jacquard weaving process using a Jacquard loom. Since Draxö is silent as to the specific weaving process, it would have been necessary and therefore obvious to look to the prior art for conventional weaving processes. Land provides this conventional teaching, showing that it was known in the wallcovering art to form a fabric for use in wallcovering comprising textured glass woven yarns, wherein the fabric is woven into various styles including Jacquard, and woven using known looms (Land, column 1 line 7 to column 4 line 36, column 5 line 34 to column 6 line 2). It would have been obvious to one of ordinary skill in the wallcovering art at the time the invention was made to form the woven glass fiber textile fabric of Draxö, wherein the fabric is formed from the process as taught by Land, motivated by the desire of forming a conventional wallcovering with a style known in the wallcovering art to be predictably suitable for use in wallcovering, based on the desired physical properties of the fabric including style, appearance, hand, and loft. Additionally, it would have been obvious to one of ordinary skill in the wallcovering art at the time the invention was made to form the woven glass fiber textile fabric of Draxö, wherein each glass fiber yarn is texturized, as taught by Land, motivated by the desire of forming a conventional wallcovering with improvements known in the wallcovering art to be predictably suitable for use in wallcovering, such that the yarn is texturized or bulked to provide improved yarn coverage and other desirable properties such as improved hand and loft.

Regarding claims 3 and 4, the prior art teaches that the titer of the warp yarn is about 34 tex or about 70 tex (Draxö, paragraph 0017).

Regarding claims 6 and 7, the prior art teaches that the titer of the weft yarn is about 200 tex or about 330 tex (Draxö, paragraph 0018).

Additionally, the warp and weft densities and the titer of the glass fiber yarn in the warp and the titer of the glass fiber yarn in the weft are obvious because it would have been obvious to one of ordinary skill in the art at the time the invention as made to vary the warp and weft densities and warp and weft titer to within the claimed ranges, as it naturally flows from the teachings of the prior art and it is understood by one of ordinary skill in the art that the densities and titer determine various physical properties of the fabric including the strength, density, porosity, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art.

Regarding claim 11, the prior art teaches that the textile is impregnated with a chemical formulation comprised of a starch binder and a polymeric binder (Draxö, paragraphs 00001-0022, 0031-0033, 0039).

#### **(10) Response to Argument**

Rejection of claims 1, 3, 4, 6, 7, and 11, under 35 U.S.C. 103(a) as being unpatentable over Draxö in view of Land.

Contrary to the current rejection, Appellants argue that the Office appears to be picking and choosing the glass fiber yarns of Draxö and combining it with the Jacquard weaving process

using a Jacquard loom as disclosed by Land in an attempt to arrive at the presently claimed woven, patterned glass fiber textile fabric.

Regarding Appellants' arguments, Examiner respectfully disagrees. Under 35 U.S.C. 103 (a), the obviousness of an invention cannot be established by combining the teachings of the prior art references absent some teaching, suggestion, incentive, or predictability supporting the combination. *ACS Hospital Systems, Inc. v. Montefiore Hospital*, 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984); *KSR International Co. v. Teleflex Inc.*, 82 USPQ2d 1385, 1395-97 (2007). This does not mean that the cited prior art references must specifically suggest making the combination. *B.F. Goodrich Co. M Aircraft Braking Systems Corp.*, 72 F.3d 1577, 1582, 37 USPQ2d 1314, 1318 (Fed. Cir. 1996); *In re Nilssen*, 851 F.2d 1401, 1403, 7 USPQ2d 1500, 1502 (Fed. Cir. 1988)). A suggestion or motivation to combine references is an appropriate method for determining obviousness, however it is just one of a number of valid rationales for doing so. The test for obviousness is what the combined teachings of the prior art references would have suggested to those of ordinary skill in the art. *In re Young*, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991); *In re Keller*, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). This test requires us to take into account not only the specific teachings of the prior art references, but also any inferences which one skilled in the art would reasonably be expected to draw therefrom. *In re Preda*, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

The claimed invention is directed to a woven glass fiber fabric comprised of a glass yarn with a titer from about 30 to 75 tex as the warp, another glass fiber yarn with a titer from 190 to 350 tex as the weft, wherein the warp density ranges from 2.5 to 5 threads/cm and the weft density ranges from 2.0 to 12 threads/cm, wherein the fabric is formed from a Jacquard weaving

process, and wherein each glass fiber yarn is a sliver or texturized. Draxö teaches a woven glass fiber fabric (Draxö, paragraphs 0001 and 0016) comprised of a glass fiber yarn having a titer in the warp such as 34 to 68 tex or 139 to 142 tex (Id., paragraph 0017) and a glass fiber yarn having a titer in the weft such as 165 to 550 tex (Id., paragraph 0018). Draxö teaches that the warp density of the fabric may vary, such as approximately 315 to 340 ends per meter or approximately 680 ends per meter (Id., paragraph 0017), and that the weft density of the fabric may be approximately 170 to 600 ends per meter. It should be noted that in the case where the claimed ranges overlap or lie inside ranges disclosed by the prior art, a *prima facie* case of obviousness exists. *In re Wertheim*, 541 F.2d 257, 191 USPQ 90 (CCPA 1976); *In re Woodruff*, 919 F.2d 1575, 16 USPQ2d 1934 (Fed. Cir. 1990). Additionally, it would have been obvious to one of ordinary skill in the art at the time the invention as made to vary the warp and weft densities and warp and weft titer to within the claimed ranges, as it naturally flows from the teachings of the prior art and it is understood by one of ordinary skill in the art that the densities and titer determine various physical properties of the fabric including the strength, density, porosity, and appearance of the fabric, and because it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

In an exemplary embodiment, Draxö teaches that each of the yarns are texturized (Id., paragraph 0039). Therefore, Draxö appears to teach the claimed invention, but does not appear to teach that the fabric is formed from a Jacquard weaving process. However, since the woven fabric of Draxö necessarily comprises a type of weave formed from a weaving process, and since Draxö is silent as to the specific weaving process, it would have been necessary and therefore

obvious to look to the prior art for conventional weaving processes. Land provides this conventional teaching, showing that it was known in the wallcovering art to form a fabric for use in wallcovering, comprising textured glass woven yarns, wherein the fabric is woven into various styles including Jacquard, and woven using known looms (Land, column 1 line 7 to column 4 line 36, column 5 line 34 to column 6 line 2). It would have been obvious to one of ordinary skill in the wallcovering art at the time the invention was made to form the woven glass fiber textile fabric of Draxö, wherein the fabric is formed from the process as taught by Land, motivated by the desire of forming a conventional wallcovering with a style known in the wallcovering art to be predictably suitable for use in wallcovering, based on the desired physical properties of the fabric including style, appearance, hand, and loft.

Additionally, although Draxö suggests texturizing the yarns, it would have additionally been obvious to one of ordinary skill in the wallcovering art at the time the invention was made to form the woven glass fiber textile fabric of Draxö, wherein each glass fiber yarn is texturized, as taught by Land, motivated by the desire of forming a conventional wallcovering with improvements known in the wallcovering art to be predictably suitable for use in wallcovering, such that the yarn is texturized or bulked to provide improved yarn coverage and other desirable properties such as improved hand and loft.

Therefore, since the prior art combination teaches and/or suggests each of the claimed limitations, the prior art combination renders obvious the claimed invention.

Appellants argue that the results of combining Draxö and Land would not have been predictable, given the different glass yarn disclosed by each of Draxö and Land. Examiner respectfully disagrees. As Appellants note, Land is not relied on to teach glass yarn sizes and

Land does not require the individual filaments to have a specific diameter. Draxö and Land are both directed to woven glass fiber fabrics used in wallcoverings. Additionally, since Draxö does not set forth that the woven glass fiber fabrics are required or limited as to the type of weaving processes used to form the woven glass fiber fabrics, one of ordinary skill in the wallcovering art at the time the invention was made would have been motivated to form the woven glass fiber fabric with a conventional weaving process known as being suitable for woven glass fiber fabrics and for wallcoverings. As shown in Land, woven glass fiber fabrics used in wallcoverings may be formed from a variety of weaving processes into, for example, a Jacquard woven fabric. Additionally, it naturally flows from the teaching of Land, that the various styles and weaving processes are chosen based on the desired appearance and texture. Therefore, it would have been obvious to one of ordinary skill in the wallcovering art at the time the invention was made to form the woven glass fiber textile fabric of Draxö, wherein the fabric is formed from the process as taught by Land, motivated by the desire of forming a conventional wallcovering with a style known in the wallcovering art to be predictably suitable for use in wallcovering, based on the desired physical properties of the fabric including style, appearance, hand, and loft.

Additionally, Appellants argue that the warp glass fiber yarns are much larger than those presently claimed, but do not provide evidence that the prior art references are necessarily not combinable, and it is well-settled that unsupported arguments are not a substitute for objective evidence. *In re Pearson*, 494 F.2d 1399, 1405, 181 USPQ 641, 646 (CCPA 1974). Although Appellants argue that the results of combining the prior art references would not have been predictable, Appellants do not provide evidence that the prior art references are necessarily not combinable and that the results are not predictable.

Appellants argue that a judgment on obviousness must not include knowledge gleaned only from Appellants' disclosure. Examiner agrees. However, in response to Appellants' argument that Examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the time the claimed invention was made, and does not include knowledge gleaned only from the Appellants' disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971). In the present case, Draxö teaches the claimed woven glass fabric or it would have been obvious to form the claimed woven glass fabric based on the totality of the teachings of Draxö. Additionally, Land teaches a substantially similar woven glass fabric as Draxö which is similarly used to form wallcoverings, wherein the woven glass fabric may be a Jacquard woven fabric. Therefore, based on the totality of the teachings of Draxö and Land, it would have been obvious to form the woven glass fabric of Draxö, formed as a Jacquard woven fabric, as Land teaches the suitability of such a Jacquard woven fabric when forming woven glass fabrics for wallcoverings, based on the desired appearance and texture and physical properties of the woven glass fabric.

Appellants argue that the claimed invention overcomes the prior use of specific limiting values of glass fiber yarns in producing patterned glass fabrics on a Jacquard loom. Examiner respectfully disagrees. Draxö teaches and/or suggests the claimed glass fiber yarns in combination or that it would have been obvious to form the woven glass fabric with glass fiber yarns within the claimed titers and densities. Additionally, Land teaches that it was known in the wallcovering art to form a woven glass fabric on a Jacquard loom. Therefore, the combined

teachings of the prior art teaches and/or suggests forming the woven glass fabric of Draxö from a Jacquard loom within the scope of the claimed invention.

**(11) Related Proceeding(s) Appendix**

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/Peter Y Choi/  
Examiner, Art Unit 1794

/Andrew T Piziali/  
Primary Examiner, Art Unit 1794

Conferees:

/Keith D. Hendricks/  
Supervisory Patent Examiner, Art Unit 1794

/Stanley Silverman/  
Supervisory Patent Examiner, Art Unit 1793